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(54) Title: METHODS OF ASSESSING THE RISK OF REPRODUCTIVE FAILURE BY MEASURING TELOMERE LENGTH

(57) Abstract: The invention features a method of identifying oocytes with a risk of reproductive failure and/or aneuploidy based on a telomere length assay.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/32672

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; C12P 19/34

US CL : 435/4, 6, 91.1; 536 24.3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/4, 6, 91.1; 536 24.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,741,677 A (KOZLOWSKI et al.) 21 April 1998 (21.04.1998), see whole document, especially the abstract and columns 2-3, 5 and 8-10.	1, 4-5, 9 ----- 2-3, 6-8, 10-54
Y	KINUGAWA et al. "Telomerase Activity in Normal Ovaries and Premature Ovarian Failure". Tohoku J. Exp. Med. 2000, Vol. 190, pages 231-238, see whole document.	1-54
Y	HULTDIN et al. "Telomere Analysis by Fluorescence In Situ Hybridization and Flow Cytometry". Nuc. Acids Res. 1998, Vol. 26, No. 16, pages 3651-3656, see whole document.	1-54
A	LIU et al. "Aberrant Fertilization and Early Development of Germs Cells with Dysfunctional Telomeres from Telomerase-Null Mice". Biology of Reproduction. 2002, Vol. 66, No. 1, pages 161-162, see whole document.	1-54
A	LIU et al. "An Essential Role for Functional Telomeres in Mouse Germ Cells during Fertilization and Early Development". Developmental Biology. 2002, Vol. 249, pages 74-84, see whole document.	1-54

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US03/32872

Continuation of B. FIELDS SEARCHED Item 3:

Databases: USPAT, PGPUB, EPO, JPO, Derwent, Medline, Biosis, Embase, Biotechds, CaPlus

Terms: oocyte, telomere, polar body, in situ hybridization, Q-fish, in vitro fertilization, reproduction, reproductive, cell, chromosome, aneuploidy.